

horizontal wave pressures when secured to the supporting members,

wherein said system is formed of corrosion resistant material and is able to withstand the forces of waves in a wave-zone portion of an offshore platform.

as
cont
16
22 (Amended) The system of claim 21, wherein [the grating sheets] said corrosion resistant material[s such as] is fiberglass.

17
23 (Amended) The system of claim 21, wherein said [the L-shaped connectors and plate fasteners are formed of a] corrosion resistant material [such as] is stainless steel.

REMARKS

Applicant affirms the election of the invention of Figs. 1-4B, claims 1-13, 16, and 21-23 as discussed in the telephone interview on May 6, 1997 with traverse. Applicant thereby cancels claims 14-15, and 17-20.

Applicant notes the Examiner's objection to the Abstract as containing the word 'invention'. Amendment of the abstract to delete the reference to 'invention' has accordingly been made.

The Examiner has rejected Claim 1 as allegedly being anticipated by Meyers, U.S. Patent Number 2,075,588. The Examiner points to Figure 7 of the Meyers Patent as showing a generally L-shaped member (2) with a connection means (19). Applicant respectfully avers that Claim 1 of the instant invention, as amended, is not anticipated by the Meyers reference because the two L-shaped members are composed of different materials and designed for entirely different purposes. The Meyers reference, and in particular Figure 7 is directed toward a mirror and picture frame and would not be suitable for use as a fastener for grating sheets on support

rods in offshore platforms. The L-shaped member of Figure 7 is specifically formed of "resilient material, such as sheet steel or sheet brass having a substantial amount of resiliency" (Column 2, lines 23-25). In the form of the frame shown in Figure 7, the members are made by "folding relatively thin sheet metal". In sharp contrast, the apparatus of the instant invention is specifically formed of corrosion-resistant material. Furthermore, the apparatus of the instant invention is designed to be able to withstand the forces of waves in a wave-zone portion of an offshore platform or other hydraulic zone area. Materials having a substantial amount of resiliency and/or made of relatively thin sheet metal, would decidedly not be able to withstand the significant multidirectional forces of waves in a wave-zone portion of an offshore platform or other hydraulic zone area. Thus, applicant respectfully avers that Claim 1, as amended is patentably distinct over Meyers.

The Examiner has rejected Claims 1-6 as being unpatentable over McClure, U.S. Patent Number 1,567,446. The Examiner alleges that McClure teaches an apparatus for securing a grating sheet including an L-shaped member, having teeth, and a portion for securing to the structure another structure. However, applicant respectfully disagrees. McClure's invention is simply to provide a "neat, strong and substantial border construction for wire mesh work". 'Strong' for the connection of a border to a wire mesh guard, is not the same as 'strong' for a connection of a sheet grate to a support member in an offshore platform environment.

Wire mesh guards are typically used to protect people from potentially dangerous machinery such as, for example, a person's hands from the blades of a moving fan. The guard would be placed in front of the machinery to act as a barrier between the machine and the person. The object of providing a marginal border for such wire mesh guards is to make sure the border provides a neat finish so that the guard itself does not pose a danger via its exposed wire ends.

The mechanism for connecting the border on the wire mesh, however is relatively weak,

particularly when compared to the connecting apparatus of the instant invention. The McClure patent teaches that "the end wires of the wire mesh fabric are enclosed in the border members and are held therein by the kinked portions of the wires which cross them". The kinked portions "lock" the wires to the border portion. Thus, the strength comes solely from the friction created between the kinked portions of the wires and the border. Such a border would be strong enough not to fall off the wire mesh, but would certainly not be of sufficient strength to withstand the substantial multidirectional forces created by ocean waves and experienced by offshore platform environments. Furthermore, a wire mesh guard border need not be made of corrosive resistant material as it is unlikely to be exposed to the harsh, salty environments experienced by offshore platforms constantly exposed to an ocean's salt water. Thus, the apparatus of the instant invention, being both corrosion-resistant and able to withstand a substantial amount of multidirectional forces is not anticipated by the wire mesh guard border of the McClure patent.

The Examiner has rejected Claims 7, 8, 13 and 16 as being unpatentable over Joseph, U.S. Patent Number 2,705,550. The Examiner alleges that Joseph teaches an apparatus for securing a grating sheet to a structure, comprising: a top plate having a hole therein; a bottom plate having an opening for receiving an engaging means; and an engaging means. The apparatus of Joseph, according to the Examiner is considered to be able to perform in the manner of the claimed intended use. Applicants respectfully disagree.

Claim 7 of the instant invention describes an apparatus formed of corrosion resistant material that is able to prevent displacement of a grating sheet from a structural member by extreme wave action. As discussed on page 2, lines 20-23 of the instant specification, "the circular motion of waves that constantly wash through the grating subjects it to multidirectional forces". The Joseph Patent describes a fastener for grating walkways for use along the top of boxcars. While boxcars are arguably subject to more force than the wire mesh grating borders,

they are certainly not subject to the substantially harsh multidirectional forces of waves. The Joseph patent does not teach strength of its apparatus against substantial multi-directional forces. Indeed, the only force discussed in the Joseph patent is the force exerted by the fastener on the grate. Specifically the Joseph patent states "the force exerted by the fastener on the grating is substantially all shear".


In addition to not being subjected to extreme multidirectional forces, boxcars are not subject to the extreme salt conditions present in ocean water. Thus, the fasteners of walkways on top of boxcars need not be constructed of corrosion-resistant material. Indeed, the Joseph patent does not teach anything related to corrosion-resistance. Therefore, it is not obvious, nor even anticipated that the fastener of the Joseph patent would be able to work in the offshore platform environment in which the instant invention is specifically designed to work as there is no basis to assume that the material used by Joseph is corrosion-resistant.

The Examiner has rejected Claims 21-23 as being unpatentable over McClure in view of Joseph. The Examiner alleges that the limitations of Claim 21 parallels a combination of the limitations of claims 1 and 7 which were rejected above and that a combination of McClure and Joseph provide for an apparatus which more securely fastens the grating sheets to a structure. However, neither McClure nor Joseph provide a fastener that is both corrosion-resistant and able to withstand the multi-directional forces of crashing waves. Although Joseph provides for an apparatus which fastens grating to a support structure, this apparatus is not taught to be corrosion-resistant nor able to withstand powerful multidirectional wave forces. Claims 21-23 are neither anticipated by, or obvious in view McClure in view of Joseph because neither McClure nor Joseph suggest or teach multidirectional strength and/or corrosion-resistance.

In view of the amendments and explanations above, applicant respectfully submits that the claims are now in condition for allowance. In the event that minor claim amendments are

necessary to meet formal requirements, applicant invites the Examiner to telephone the undersigned so that amendments can be made.

Respectfully submitted,

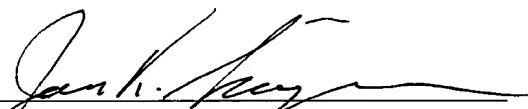

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CERTIFICATE UNDER 37 CFR 1.8(a)

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